

VITOR PORDEUS



# THE EARTH IS NOT THE CENTER OF THE UNIVERSE



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**THE MUNICIPALITY OF RIO DE JANEIRO**

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Vitor Pordeus

**TEXT – PLAY (SCRIPT)**

Life of Galileo, by Bertolt Brecht

**DIRECTION, ADAPTED SCRIPT, READING,**

**LIBRETTO TEXTS AND CULTURAL HEALTH AGENT**

Vitor Pordeus

**ORIGINAL SOUNDTRACK COMPOSITION,**

**MUSICAL DIRECTION**

**AND CULTURAL HEALTH AGENT**

Meri de Liz

**PERCUSSION DIRECTOR, ACTOR**

**AND CULTURAL HEALTH AGENT**

Elvis Ferreira

**ACTORS AND CULTURAL HEALTH AGENTS**

Marcio Perrota (reading), Aline Barros, Daisy Cuccinelo, Katia Mara, William Araújo, Lidianne Correa, Cristiane Conceição, Luiz Claudio Jansen, Allysson Silvério, Kelson Evens, Paulo Henrique Andrade, Jaqueline Figueiredo, Alan Gomes, Michelle Felisberto, Leandra Moraes, Rosangela Ribeiro, Jaime Dellacorte.

**MAKING OF GALILEO DOLL**

Angelo Ignácio

**INVITED ACTOR**

Raquel Carataca

**INVITED ACTOR AND MUSICIAN**

Marcus Vinicius Matraca

**SOUND DESIGN, SOUND OPERATOR**

**AND CULTURAL HEALTH AGENT**

Bernardo Cahuê

**PHOTOGRAPHS**

Marina Faissal e Nelson Duarte

**THANKS**

Angela Delamare, Antônio Pedro Borges, Caique Botkay, Cesar Dias de Oliveira, Enilson D'Oliveira, Gert Wimmer, José Paulo Pessoa, Larissa Pardal, Marcia Torres, Marcio Villard, Mauro Blanco, Paula Fiorito, Pedro Lima, Rosana Iozzi e Artur Custódio de Souza.

**PRODUCTION**

Center Culture, Science and Health  
City Health Department and Civil Defense  
& TupiNagô Laboratory of Arts and Science

**NCCS STAFF OF CULTURAL HEALTH AGENTS**

Eduardo Rocha, Ana Maria Oliveira, André Trindade, Rafael Pinheiro, Aldecir Francisco Costa, Paulo Henrique Soares da Silva, Danilo Marques da Silva, Paulo Weber Pinto, Alan Botelho, Mauricio Tosta, Miguel Bastos.

**COVER AND ART DIRECTION**

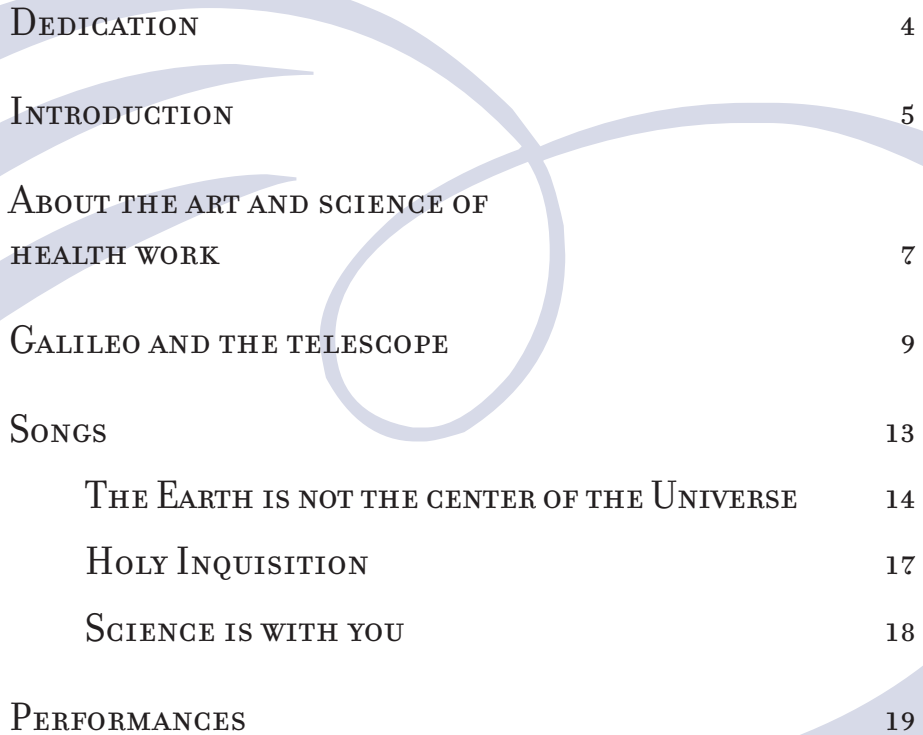
Susan Johnson

**PAGING – (GRAPHIC DESIGN)**



Henrique Persechini



# SUMMARY



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*Health and Citizenship Celebration against Leprosy. Central do Brasil (Central Station), Rio de Janeiro, October, 2009*

## WE DEDICATE THIS WORK TO

Nelson Vaz for inventing an immunology for life and health and not of vaccines and diseases.

Amir Haddad, our master, for giving the theater back to the people and at the same time having developed a method of "cultural action for freedom".

Hans Fernando Dohmann, for being a human being of great sensibility and intelligence, making the change in our public health, through culture, science and art, something possible. Despite the Inquisition.

## INTRODUCTION

Goodness of soul! Aren't you really saying that there's nothing for them, the wine has all been drunk, their lips are parched, so they had better kiss the cassock And why is nothing there? Why is the orderliness in this country merely the order of an empty cupboard, and the necessity merely that of working oneself to death? Among bursting vineyards, beside the ripening cornfields! Your Campagna peasants are paying for the wars which the representative of gentle Jesus is waging in Germany and Spain. Why does he make the earth the center of the universe? So that the See of St. Peter [Church hierarchy] can be at the center of the earth! That's what it is all about. You're right, it's not about the planets, it's about the peasants of the Campagna. And don't talk to me about the beauty given to phenomena by the patina of age! You know how the Margaritifera oyster produces its pearl? By a mortally dangerous disease which involves taking some unassimilable foreign body, like a grain of sand, and wrapping it in a slimy ball. The process all but kills it. To hell with the pearl, give me the healthy oyster! Virtues are not an offshoot of poverty, my dear fellow. If your people were happy and prosperous they could develop the virtues of happiness and prosperity. At present the virtues of exhaustion derive from exhausted fields, and I reject them. Sir, my new pumps will perform more miracles in that direction than all your ridiculous superhuman slaving. - 'Be fruitful and multiply', since your fields are not fruitful and you are being decimated by wars. Am I supposed to tell your people lies?



*Bertolt Brecht,  
line of Galileo Galilei in The life of Galileo scene 8*





*The band: Meri de Liz, Marcus Matraca, Elvis Ferreira and Alan Gomes.*

## ABOUT THE ART AND SCIENCE OF HEALTH WORK

“The Earth is not the Center of the Universe!”: musical play in open spaces which is a result of the meeting between health professionals, endemic control agents (mosquito killer) from the City Health Department and Civil Defense of Rio de Janeiro, with Galileo Galilei, mathematician, philosopher and pioneer scientist of the XVII century. The story of the man that based himself on the new instruments of the nascent science, the telescopes, to demonstrate that the polish astronomer Nicolau Copernicus had claimed, almost a hundred years before, that the Earth was not at the center of the universe, contrary to the Scriptures and Aristotle’s philosophy, which were considered maximum truths by the Church pulpits and University Chairs. Our encounter was with Galileo, his courage, his consideration to his people – what led to him being condemned by the Holy Inquisition in 1633 was particularly the publication of his astronomy notes in Italian, the language of the people for many and not in Latin, as the academic and religious norm demanded. The most important thing was his courage to break with the order of the empty cupboard, which was sustained by men’s invented truths, men who had powerful economic and political interests behind them.

It was very interesting to witness the endemic the endemic agents’ personal identification, while questioning their practice, with the XVII century scientist. I believe this occurred once these agents are at the basis of a health system pyramid in which the practice is based on XIX century science, Germ Theory, invented by the French scientist Louis Pasteur, and based on the idea of infectious agents – viruses or bacteria charged by the illnesses of the healthy organisms through the infection. It is the emergence of the infectious paradigm that is present until today. It is from this paradigm that the main modern medicine advances came from, which founded the pharmaceutical care model, the concept of pills invented by



the immunologist Paul Erlich who discovered that a certain substance, a pigment called Salvarsan, was capable of inhibiting the growth of the bacteria responsible for syphilis, *Treponema pallidum*.

There were many advances, but today we face the obvious exhaustion of the pharmaceutical model in the citizen's approach for the public health construction. The Cartesian medicine of cause and effect of specific agents of diseases was dismantled by different authors but certainly one of the most interesting is the Brazilian Nelson Vaz. After surprising discoveries with the immunological system of the alimentary mucosa, in the last thirty years, Vaz developed an interpretation of the immunological phenomenon that was radically different from Pasteur's, which continue to guide public policies in Brazil. Vaz's work was heavily influenced by the unexpected encounter with the Chilean neurobiologist Humberto Maturana. Together they created a new knowledge of the South Atlantic, destined to change the path of international biology claiming another form of explaining nature, in a more biological way and closer to complex and immanent relations of living systems, a more interesting way of thinking and expressing emotions as states of the body, understanding that our vocation is to cooperate, that there is no living entity isolated in itself, radically changing our conception knocking down warlike and defense-attack metaphors that dominate the biological discourse whose cultural and social impact is enormous.

In the new contemporary perspective on biology we do not think of the emotions separated from the physical plan nor do we think of culture separated from structural biology, the ideas are states of the body. In this sense, health and disease phenomenon are essentially cultural-biological phenomenon and for the better efficiency of the health system we have to let go of high transforming power cultural technologies to mobilize the citizens around the public health's cause, for, after all; truth is the daughter of time and not of authority. The earth is not the center of the universe.



## ❧ GALILEO AND THE TELESCOPE ❧

Our paths are uncertain, the improbabilities are immense, reality is urgent, terror and poverty reign in all parts, murder has become a banality, the lack of perspective, of most of humanity, is criminal: our society is stuck in a cultural-ideological trap where it is denied to the individual any possibility of expression, development, production of knowledge as well as production of beauty and possibility. We are sunk in the pit of the impossible, the fear, the misrule and the corruption of all. We are fed with news and headlines that blindly reaffirm this monstrous reality, reminding all of the dangers and threats of a competitive world. The success of the very few selected ones is shown, ones that are attached to some sort of misery exploitative machine, they pose as triumphant ones, with ostentatious parties and ivory yachts, very expensive clothes and diamond shoes. None of this matters, it's not worth anything and it disappears in time. We are trapped in a way

of life based on competition, accumulation of resources, anti-natural hierarchies, with our own desires implanted by TVs and marketing strategies, we put our blood into bureaucratic jobs which we do not believe in, to maybe loose it all in a stroke of luck, to be discovered by the media and transcend to the category of professional celebrity, to receive love and respect for your own voice, which is now validated by the mass of eyes and ears controlled by the Big Machine.



*Galileo is exposed at Praça Tiradentes after being condemned by the Holy Inquisition. August 2009.*

How can one escape from such a universally preset scheme? How can you run from an ideological encirclement that has dominated almost everyone? Almost everyone has surrendered to the market's utopia, the dream to be accepted, respected, famous, the best of his or her class, the dream women, men made in laboratories who are better than any other. How can one run away from all of this idealization that comes from the Atlantic North, which affirms a colonizing esthetics, with standard images, words and sounds that have no relation to our Greco-jewish-christian-tupi-nagô, Brazilian, mixed, tribal and naturally collective pattern? How

does one runaway from these rigid standards that take millions to gyms, shopping centers and universities that fabricate a lot less than human beings but competitive creatures with heightened egos, who are ready to slaughter the obstacles towards success, occupying all decision places in social management?

There is a scene in Brecht's play "the life of Galileo" that seems to sum up the dilemma. Galileo receives the visit of Tuscany's Gran-Duke, who is a boy. The Gran-Duke is followed by his entourage of preceptors, theologians, philosophers and mathematicians who are responsible for his education. At a certain moment Galileo asks the entourage to look into the telescope to observe the movement of the stars which would prove the theory that the Earth is not the center of the universe, the sun occupies that place and that our planet orbits around the sun. However, the teachers suggest a form of dispute to the scientist and they start discussing divine Aristotle's philosophy and the crystal spheres responsible for fixating the stars in the firmament, making the movement around the sun impossible, but on the contrary fixating the stars in an immobile universe scheme. Galileo starts to argue:

Galileo: Gentlemen, to believe in the authority of Aristotle is one thing, tangible facts are another. You are saying that according to Aristotle there are crystal spheres up there, so certain motions just cannot take place because the stars would penetrate them. But suppose these motions could be established? Mightn't that suggest to you that those crystal spheres don't exist? Gentlemen, in all humility I ask you to go by the evidence of your eyes.

The philosopher: If Aristotle is going to be dragged in the mud—that's to say an authority recognized not only by every classical scientist but also by the chief fathers of the church—then any prolonging of this discussion is in my view a waste of time. I have no use for discussions which are not objective. Basta.

Galileo: Truth is born of the times, not of authority. Our ignorance is limitless: let us lop one cubic millimeter off it. Why try to be clever now that we at last have a chance of being just a little less stupid? I have had

the unimaginable luck to get my hands on a new instrument that lets us observe one tiny corner of the universe a little, but not all that much, more exactly. Make use of it.

Ultimately, the scene ends with the Grand-Duke's teachers furious, threatening Galileo, threatening to denounce Galileo to the papal astronomer. We know how this story ended, with Galileo being taken and condemned by the Holy Inquisition to home life imprisonment having abjured and denied his own theory before it was published.

The only thing that saves is the understanding about nature. However, to be able to look at the telescope, learn new theories and ideas we need to be open to new possibilities, put our certainties into question, build the truth collectively, observe nature, do research, and get into contact with our own ignorance. But how can we do that in a world where it is constantly told us that we cannot fail? That we need to be efficient, successful, earn a lot of money, where there is no space for uncertainties, as well as dialogue and conversation and we are forced to constantly offer/show results. We are talking about a pedagogical challenge that involves study, reflection/action, where you can review ideological basis and certainties. "What one doesn't know on his own is not known. Put your finger on each item, you are the one that will pay the bill", says Brecht in one of his poems, reminding us of the necessity of strictness, critique, the responsibility of living in search of assertions, with ethics of a more profound commitment with humanity and nature.

The best of all things is to recover the pleasure of knowledge, in the encounter with nature, to abandon stereotypes of an industrial life and regain the essences of living, and incorporate true ideas about nature. We need biology in all sectors, we need to generate a new way of life encouraged by natural knowledge which will develop in harmony with nature. Self-sustainability is possible, eliminating the necessity of money is possible, another way of life and another reality is possible. The answers are here, just look in the telescope.



# SONGS



*"The Sun is the center of the Universe". Praça Tiradentes, Rio de Janeiro, August 2009*



SONG 1

THE EARTH IS NOT THE CENTER  
OF THE UNIVERSE

Dear people, ladies and gentlemen  
Before the corporations' carnival procession  
We will present the most recent Florentine song  
The phenomenal discovery  
Galileo Galilei – the earth revolving around the sun

Due to a colossal divine power miracle  
Where there was no cat the world appeared  
And see what it led to  
In the beginning it was chaos  
But being a friend of clarity, God said to  
The sun that henceforth to walk with a lantern  
An always lit lantern in the service of the princess Earth  
And so (and so), in the law of the divine precept it spins.  
This, my people, is the great order  
But what came later, my people?

Doctor Galileo stood up  
Threw out the bible and took out his telescope (repeat)  
He cast a glance at the universe  
And said to the sun: stand still, Sun! Still!

The lady wants to buy  
The good fish of the place  
The saleswoman takes some bread  
Eats the fish and says no

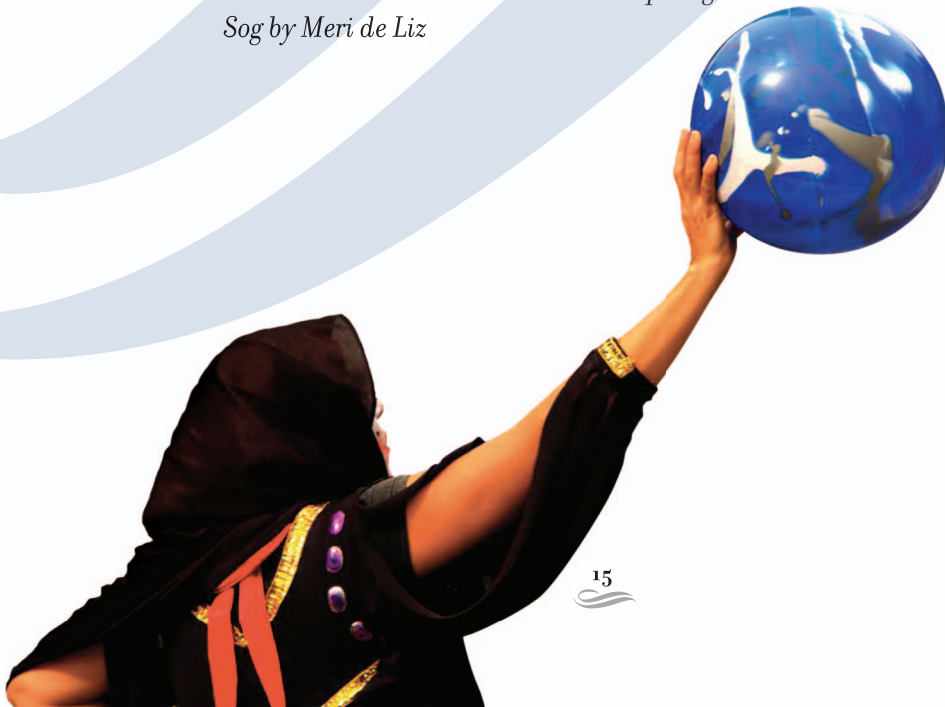


The bricklayer makes a house  
Shovel and rock are not his  
When the house was finished  
He stayed there himself

And the world didn't end? No, no, no, no this is not a joke!  
If the rope is not wide, young man, don't hang your neck and  
goodbye civilization!  
For lets be honest, we are white, we have bank accounts  
Feel good and feel bad, to be bossed around and to order around  
is not the same thing!

The colonist kicks the *búndios*  
Of the lord of the estates  
And the maid of the pigsty (repeat)  
Eats meat the whole year long  
Beat the drum!

*Text: Adaptation of "The life of Galileo" by Bertolt Brecht by  
Victor Pordeus and the Laboratório TupiNagô  
Sog by Meri de Liz*





*Health and Citizenship Celebration at Central do Brasil: Cultural Health Agents, October 2009*

SONG 2

✻ HOLY INQUISITION ✻

But the Holy Inquisition,  
vigilant persecutor  
implacable huntress  
of the men of reason

Did not leave things without a comeback  
They arrested Mr. Galileo  
Heretic, the priests judged  
They threatened him with torture  
And science lost itself

In 1633 in Rome, the cardinal Inquisitor,  
Sinister torturer priest,  
So many people he murdered  
In the name of Divine Love  
Made Doctor Galileo  
Give up his value,  
Made the noble scientist deny  
What he before had said

"The Earth is not the Center of the Universe!  
I was mistaken in prose and verse!"

The Church is right.  
The reason for that I cannot say!"

*Text: Vitor Pordeus*

*Song: Meri de Liz*

### SONG 3

## SCIENCE IS WITH YOU

Distinguished public, science at this stage  
Leaves to the careers the national ground.  
And we that need it the most,  
Me, you, him, we shall be left behind.  
My neighbor, science is now with you,  
Take care of it, take good care of it, but as a friend.  
Or else it will rise, grow, explode and come down,  
It will eat us all and then forget,  
And then forget.

*Text: Bertolt Brecht*

*Song: Meri de Liz*



## PERFORMANCES

### JULY/2009

Science is Culture 2009 (Ciência é Cultura), Gonzaguinha Theater, Calouste Gulbenkian Art Center, Praça IV; Presentation at the AP3.2 (Candido Mendes College, Méier) Health District (Distrital de Saúde) Conference. Performance at the Nise de Silveira Municipal Institute, in Engenho de Dentro.

### AUGUST/2009

Science is Culture 2009 (Ciência é Cultura). Gonzaguinha Theater, Calouste Gulbenkian Art Center, Presentation at the AP2.1 Health District (Distrital de Saúde) Conference (Deolindo Couto Neurology Institute, in Botafogo); Health and Citizenship Celebration at Praça Tiradentes, Rio de Janeiro.

### SEPTEMBER/2009

Science is Culture 2009 (Ciência é Cultura). Gonzaguinha Theater, Calouste Gulbenkian Art Center, Presentation at the Health Municipal Conference (Mario Lago Theater, at Colégio Pedro II in São Cristóvão); Performance at the No Car World Day event at the Buraco do Lume, Downtown; Performance at the Health and Citizenship Celebration of Rio das Pedras;

### OCTOBER/2009

Performance at the Endemic Control Seminar at the BNDES theater, Performance at the Penha IAPI Health and Citizenship Celebration; Health and Citizenship Celebration against Leprosy at Central do Brasil, Rio de Janeiro.

### NOVEMBER/2009

Performance at Parque Royal; Sobral Pinto School Presentation in Jacarepaguá.





*LAPI da Penha, Rio de Janeiro, October 2009.*